126 A FURTHER SYNONYM IN THE GENUS CONICERA MEIGEN WITH A REVISED LIST OF THE BRITISH SPECIES

(Diptera: Phoridae)

By R. H. L. DISNEY*

I have recently (Disney, 1980a, 1980b), reported new synonymies in th genus Conicera Meigen. The purpose of the present note is to report a further synonym and to provide a revised check list of the British species. Borgmeier (1963) remarks of the genus Conicera "mistakes are comprehensible in such a difficult genus". The findings of the present paper futher confirm my experience that the difficulties encountered in this genus have largely been created by taxonomists!

What is Conicera fallens Schmitz?

Schmitz (1953) separates the coffin fly, *C. tibialis* Schmitz, from *C. fallens* (and three other species) by the couplet "Vordertarsen of nicht oder ganz unbedeutend langer als tl. Die Conicera der menschlichen Leichen und särge, auch im Freien tibialis Schmitz. – Vordertarsen langer als tI, mindestens im Verhältnis 5:4...."

Borgmeier (1963) likewise distingushes C. tibialis from C. fallens (and other species) on the relative lengths of the foretarsus and tibia thus "Fore tarsus subequal to tibia (9:8; & ?)...... tibialis Schmitz.

-Fore tarsus longer than tibia "

In the descriptions given by these authors the ratio of the foretarsus to the tibia is given as 1.12 - 1.13:1 in the male and 1.14:1 in the female for *C. tibialis*. In *C. fallens* the figure for the males is 1.25:1, and for the females 1.38:1.

In my collections I have a pair of this section of the genus Conicera caught in copula (at Chilmark, Wiltshire, 8 August 1977). The front leg ratios are 1.12:1 for the male and 1.24:1 for the female. Thus on the information given by Schmitz and Borgmeier and the female is intermediate between the male is C. tibialis C. tibialis and C. fallens.

In two males, indistinguishable from the above male in terms of genitalia and other features, from Germany (from Rhineland, sent to the author by Dr. M. Boness) the ratios are 1.22:1 and 1.12:1. That is to say the first is closer to C. fallens and the latter is in agreement with \acute{C} . tibialis.

In view of this unsatisfactory situation I have recorded the ratios for a series of 48 males caught in a single day (3 June 1980) in one water trap set on the Tarn Close (Malham Tarn, North Yorkshire, Grid ref. 34/894671). The ratios varied from 1.02 - 1.29, with a mean of 1.14 (S.D. = 0.06). These flies were clearly a single species in terms of their genitalia and the sensory organ on the

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middle leg. The only other *Conicera* in the water trap were a single female of the same species and a single male of *Conicera similis* (Haliday). The observations on the males of the first species are plotted in Fig. 1. On the horizontal axis the fore-leg ratios for *C. tibialis* and *C. fallens*, according to the literature, are indicated. In the sample examined it is evident that the mean is just within the definition of *C. tibialis*. The definition for *C. fallens* is within the expected distribution about this mean but outside the limits of its standard deviation. This would account for the rarity of *C. fallens* in collections, and the data suggest, therefore, the *C. fallens* represents one extreme of a range of variation in *C. tibialis*.

In the light of the above observations I have examined (through the co-operation of Dr. H. Ulrich, Zoologisches Forschugsinstitut und Museum Alexander Koenig, Bonn) the holotype, a paratype and other specimens of *C. fallens* determined by the late Fr. Schmitz. I can detect no consistent difference between these and specimens of *C. tibialis*. I conclude, therefore, that *C. fallens* is a synonym of *C.*

tibialis.

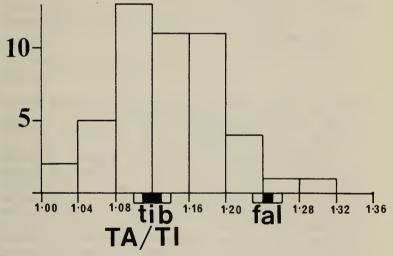


Fig. 1. Frequency histogram for ratio of foretarsus to foretibia (TA/TI) of the right forelegs of a sample of 48 *Conicera tibialis* procured in a water trap on 3 June 1980. tib = ratio for *C. tibialis* according to literature, fal = ratio for *C: fallens'* according to literature.

Revised Check List of British Conicera

The latest Check List (Colyer and Smith, 1976) gives 9 species of *Conicera* for Britain. The following amended list gives 6 species as follows:

CONICERA Meigen, 1830 S. CONICERA S. S. dauci Meigen, 1830) atra (Meigen, 1830) S. HYPOCERINA Malloch, 1913
floricola Schmitz, 1938
similis auctt., nec. Haliday, 1833
minuscula Schmitz, 1953;
schnittmanni Schmitz, 1926;
tarsalis Schmitz, 1920;
S. TRITOCONICERA Schmitz, 1952;
similis (Haliday, 1833);
pauxilla Schmitz, 1920;
tibialis Schmitz, 1925;
fallens Schmitz, 1948. syn nov.

Acknowledgements

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References

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THE FROSTED GREEN: POLYPLOCA RIDENS FABRICIUS AB. FUMOSA WARNECKE — While trunk-hunting at Brickett Wood, Hertfordshire on 16th April 1981, I was delighted to find at rest on a birch, an extreme melanic form of this local thyatirid in excellent condition. Reference to the R.C.K. collection in the BMNH showed it to conform to ab. fumosa Warnecke, which is represented there by four examples, three of which are also from Hertfordshire (Tring, two, 1965; Harpenden, one, 1952), and a single specimen from Woking, Surrey, 1976. Ab. fumosa appears nearest to ab. unicolor Cockayne (cf. original description in Ent. Rec., 63: 31, plt. 2, fig. 7), but is more extreme. The fact that it may not have been recorded prior to 1952, and its apparently rather restricted distribution, may indicate that fumosa is of only relatively recent occurrence in Britain. — J. M. CHALMERS-HUNT.

THE LARGE TORTOISESHELL: NYMPHALIS POLYCHLOROS L. IN KENT. - I captured a male Large Tortoiseshell at St. Margaret's Bay, Kent on the 28th of August 1980, and exhibited it at a meeting of the Kent Lepidopterists' Group at Maidstone Museum on 21st March 1981 - A. D. HOWELL, 12, Harrow Dene, St. Peters, Broadstairs, Kent.